REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-7 are pending in the present application. Claims 1, 2, and 7 are amended by the present amendment.

In the Office Action dated January 30, 2004, Claims 1, 2, and 7 were rejected under 35 U.S.C. § 103(a) as unpatentable over Kajihara et al. (U.S. Patent No. 5,559,483, herein Kajihara) in view of Dai et al. (U.S. Patent No. 5,896,071, herein "Dai"), and Claims 3-6 were indicated as allowable.

Applicants thank the Examiner for the indication of allowable subject matter.

Claims 1, 2, and 7 were rejected under 35 U.S.C. § 103(a) as unpatentable over Kajihara and Dai. That rejection is respectfully traversed.

Independent Claim 1 is amended to recite that at least two transducers are connected in parallel and opposite phase to each other and resonant modes of the transducers are coupled to prevent in-phase resonant frequency peaks from conforming to each other. The claim amendments find support in the specification for example at page 5, line 18, to page 6, line 6, and in Figure 5 and its corresponding description. No new matter is believed to be added.

Briefly recapitulating, independent Claim 1 is directed to a surface acoustic wave device having a plurality of transducers formed on a piezoelectric substrate and the plurality of transducers include a plurality of regions. Each of the regions has a pair of comb electrodes whose surface wave propagation directions are opposite to each other. At least two of the transducers are connected in parallel and opposite phase to each other and resonant

modes of the transducers are coupled to prevent in-phase resonant frequency peaks from conforming to each other.

With this configuration, the claimed surface acoustic wave device advantageously achieves a steep out-of-band shoulder characteristic with a low loss and within a broadband, as disclosed in the specification at page 6, lines 13-25.

In a non-limiting example, Figure 1 shows the surface acoustic wave device 10 having a plurality of transducers 5, 9, 13, and 16 including a plurality of regions 3, 4, 7, 8, 11, 12, 14, and 15. Each of the regions 3, 4, 7, 8, 11, 12, 14, and 15 has a pair of comb electrodes as shown in Figure 2 and the surface wave propagation directions of the pair of comb electrodes are opposite to each other. At least two transducers 5 and 13 are connected in parallel and opposite phase to each other and the resonant modes of the transducers are coupled to prevent in-phase resonant frequency peaks from conforming to each other, as shown for example in Figure 5.

Figure 5 shows that a surface acoustic wave filter A has three resonant peaks and another surface acoustic wave filter B has another three resonant peaks, each filter has an RSPUDT electrode structure, and the filters are arranged to couple the total six resonant peaks to realize a filter of a broadband and to prevent in-phase resonant frequency peaks from conforming to each other.

Turning to the applied art, Kajihara discloses a surface acoustic wave filter in which frequencies of in-phase resonant modes of two resonators ***conform*** to each other, contrary to the claimed device. Therefore, Kajihara does not teach or suggest transducers coupled to ***prevent*** in-phase resonant frequency peaks from conforming to each other, as recited in amended independent Claim 1.

The outstanding Office Action relies on Dai for showing in Figure 4 a triple-mode SAW filter with resonant single phase unidirectional transducers. However, as already discussed in the previously filed amendment, the filters in Dai are arranged to obtain a balanced input (output), and unlike Kajihara, Dai is silent about coupling resonant modes. Therefore, Dai also does not teach or suggest coupling transducers to prevent in-phase resonant frequency peaks from conforming to each other, as recited in amended independent Claim 1.

Accordingly, it is respectfully submitted that independent Claim 1 and each of the claims depending therefrom patentably distinguish over the combination of Kajihara and Dai.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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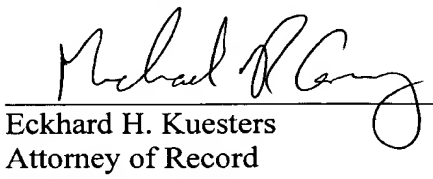

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